

NWS-00268-09.03-06/14/89

June 14, 1989

Mr. David L. Moffitt
Superintendent
Colonial National Park Service
National Park Service
P.O. Box 210
Yorktown, Virginia 23690

Dear Mr. Moffitt:

Thank you for your comments concerning the Remedial Investigation Interim Report for the Naval Weapons Station Yorktown. Below is our response to your comments. Comments are addressed in the order presented in your April 7, 1989 letter.

Items 1-7:

Comment - Final report needs a detailed explanation of how the risk assessment process is to proceed with respect to potential impacts of organics and metals on aquatic resources in the York River. There is no mention of aquatic toxicity testing as being part of the risk assessment.

Response - The components of the preliminary risk assessment will be part of the upcoming Work Plan and Sampling Plan which will be presented at the next TRC meeting. The major constituents of the preliminary risk assessment include:

a. Documentation of release of a specific contaminant from a given site, including determination of amount and concentration of contaminant.

b. Determination of pathway - How and where the contaminant is entering the environment of concern.

c. Determination of exposure point - At what point in the environment is the receptor of concern (i.e., endangered species, especially important species, etc.) exposed to the contaminant and at what concentration is the contaminant at the exposure point.

d. Determination of mechanism of intake - How is receptor of concern intaking the contaminant (ex: contamination is entering the body of the organism through sediment because the organism is a bottom feeder).

e. Determination of effect - What is the effect of the contamination on the organism of concern at the concentrations present. What are the target issues or organs which the contaminant is effecting, and is the effect considered adverse.

After this preliminary risk assessment is performed, we will determine if the effect of the contaminant warrants further

investigation. Further investigation may include toxicity testing, bioaccumulation or tissue testing, in situ testing, population studies, or other biological testing. The details of this type of ecological investigation would be included in a biota sampling plan.

Item 2:

Comment - Report should clarify if background sediment sampling is bed sediment, suspended sediment, or both.

Response - Specific sampling locations, types, and methods will be explained in detail in the upcoming Work Plan and Sampling Plan. At this point, we feel that bed sediment will be appropriate for our background sampling needs. This point will be clarified in the Sampling Plan.

Item 3:

Comment - Dames and Moore should have aquatic, terrestrial, and health-oriented toxicologists assigned to the project.

Response - Dames and Moore's staff include chemists, toxicologists, environmental engineers, and health and safety specialists.

Item 4:

Comment - Suggest that for the risk assessment residue data should be analyzed with regard to the EPA's National Water Quality Criteria as is done for surface water samples.

Response - The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) describe the use of Applicable or Appropriate Requirements (ARARs) when evaluating CERCLA hazardous waste sites. The determination of these ARARs are media-dependent because what may be an appropriate criteria for surface water protection may not be an appropriate criteria for soil, sediment, or groundwater levels. The Interim RI Report outlines the selection of these ARARs in Section 4.1.

Item 8:

Comment - Consider performing a Toxicity Investigation Evaluation during the risk assessment similar to those conducted on industrial effluents at sites where extreme acute toxicity is present.

Response - The Virginia Department of Waste Management has assumed the responsibility of coordinating the comments of all State regulatory agencies and submitting them to the Navy. If migration of contamination to nearby estuaries is determined to present sufficient risk to warrant additional remedial investigation (see preliminary risk assessment scope in Item 1), then additional environmental regulatory agencies will be afforded the opportunity

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to participate in the review of IR Reports.

Item 9:

Comment - "One other area of concern is the RI/FS study being conducted at Cheatham Annex. During the TRC meeting we expressed our interest in being added to Cheatham's TRC committee. We were assured we would be and that previous reports already released would be sent to us. As of this date we have not received anything."

Response - NSC Cheatham Annex has been requested to include the National Park Service in future TRC meeting. A copy of our latest IR Report from Cheatham Annex is enclosed for your information.

Where referred to above, your recommendations will be incorporated in the Final Interim Remedial Investigation Report or will be included in the upcoming Work Plan and Sampling Plan.

We hope this adequately addresses your comments, concerns, and recommendations. If you have further questions, please contact Dave Daly at the Atlantic Division, Naval Facilities Engineering Command, at (804) 445-6782.

We appreciate your participation in the Installation Restoration Program at the Naval Weapons Station Yorktown and look forward to working with you in future technical Review Committee meetings.

Sincerely,

F.A. Rakowski, P.E.
Head, Environmental
Programs Branch
Utilities, Energy, and
Environmental Division
By direction of the
Commander

Copy to:

TRC Members
NSC Cheatham Annex/NSC Norfolk

blind copy to:

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